

CLAIMS**1. Products containing**

- at least one non-pyrethroid insecticide, and

5 - at least one insect repellent,

the concentration of the insecticide in the product being lower than its lethal concentration 100 (LC100) when it is used alone,

as combination products for a use that is simultaneous, separated or spread over time in the preparation of an insecticide composition.

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2. Insecticide composition comprising a non-pyrethroid insecticide in combination with an insect repellent, characterized in that:

- the concentration of insecticide in the composition is lower than its lethal concentration 100 (LC100) when it is used alone, and

15 - the concentration of insect repellent in the insecticide composition is lower than the concentration of insect repellent procuring an insecticide effect when it is used alone.

3. Insecticide composition according to claim 2, characterized in that the concentration of insect repellent in the insecticide composition is lower than the concentration of insect repellent procuring a protective effect when it is used alone.

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4. Insecticide composition according to claim 2 or 3, characterized in that the concentration of insecticide in the insecticide composition is comprised from approximately its LC20 to approximately its LC40 when it is used alone.

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5. Insecticide composition according to one of claims 2 to 4, characterized in that the concentration of the insecticide in the insecticide composition corresponds approximately to its LC30 when it is used alone.

30 **6. Insecticide composition according to one of claims 2 to 5, characterized in that the weight ratio of the insecticide concentration and the insect repellent concentration in said insecticide composition is approximately 1/100 to approximately 1/10.**

7. Insecticide composition according to one of claims 2 to 6, in which the insecticide is chosen from:

a carbamate such as:

alanycarb: S-methyl-N [[N-methyl-N-[N-benzyl-N (2-ethoxy- carbonylethyl) aminothio] carbamoyl] thioacetimidate,

bendiocarb: 2,2-dimethyl-1,3-benzodioxol-4-yl-methylcarbamate),

carbaryl: 1-naphthyl N-methylcarbamate,

isoprocab: 2- (1-methylethyl) phenyl methylcarbamate,

carbosulphan: 2,3 dihydro-2,2-dimethyl-7-benzofuranyl[(dibutylamino) thio]

10 methylcarbamate,

fenoxycarb: ethyl[2- (4-phenoxyphenoxy) ethyl] carbamate,

indoxacarb: methyl-7-chloro-2,3,4a,5-tetrahydro-2-[methoxycarbonyl (-4 trifluoromethoxyphenyl)]

propoxur: 2-isopropoxyphenolmethylcarbamate,

15 pirimicarb: 2-dimethylamino-5,6-dimethyl-4-pyrimidinyl- dimethylcarbamate,

thidiocarb: dimethyl N,N'(thiobis((methylimino)carbonoyloxy) bisethanimidithioate),

methomyl: S-methylN- ((methylcarbamoyl) oxy) thioacetamidate,

ethiofencarb: 2-((ethylthio)methyl)phenyl methylcarbamate,

fenothiocarb: S-(4-phenoxybutyl)-N,N-dimethyl thiocarbamate,

20 cartap: S, S'- (2-5dimethylamino) trimethylene) bis (thiocarbamate) hydrochloride,

fenobucarb: 2-sec-butylphenylmethyl carbamate,

XMC: 3, 5-dimethylphenyl-methyl carbamate,

xylylcarb: 3,4-dimethylphenylmethylcarbamate;

25 an organophosphate such as:

fenitrothion: O, O-dimethylO- (4-nitro-m-tolyl) phosphorothioate,

diazinon: O,O-diethyl-O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate,

pyridaphenthion: O-(1,6-dihydro-6-oxo-1-phenylpyrazidin-3-yl) O,O-diethyl phosphorothioate,

30 pirimiphos-ethyl: O,O-diethyl O- (2- (diethylamino) 6-methyl-pyrimidinyl) phosphorothioate,

pirimiphos-methyl: O- [2- (diethylamino)-6-methyl-4pyrimidinyl] O, O-dimethyl phosphorothioate,

etrimphos: O-6-ethoxy-2-ethyl-pyrimidin-4-yl-O, O-dimethyl-phosphorothioate,

fenthion: O,O-dimethyl-O-[-3-methyl4-(methylthio) phenyl phosphorothioate,

- phoxim: 2 (diethoxyphosphinothoyloxyimino)-2-phenylacetonitrile,
 chlorpyrifos: O,O-diethyl-O- (3,5, 6-trichloro-2-pyridinyl) phosphorothioate,
 chlorpyrifos-methyl: O, O-dimethyl O- (3, 5,6-trichloro-2-pyridinyl) phosphorothioate,
 cyanophos: O, O dimethylO- (4cyanophenyl) phosphorothioate,
 5 pyraclofos: (R, S) [4-chlorophenyl]-pyrazol-4-yl]-O-ethyl-S-n-propyl phosphorothioate,
 acephate: O, S-dimethyl acetylphosphoroamidothioate,
 azamethiphos: S- (6-chloro-2, 3-dihydro-oxo-1,3-oxazolo [4, 5-b] pyridin-3-yl methyl
 phosphorothioate,
 malathion: O,O-dimethyl phosphorodithioate ester of diethyl mercaptosuccinate,
 10 temephos: (O,O' (thiodi-4-1-phenylene) O, O, O, O-tetramethyl phosphorodithioate,
 dimethoate: ((O, O-dimethyl S-(n-methylcarbamoylemethyl) phosphorodithioate,
 formothion: S [2-formylmethylamino]-2-oxoethyl]-O, O-dimehyl phosphorodithioate,
 phenthoate: O, O dimethyl S- (alpha-ethoxycarbonylbenzyl)-phosphorodithioate; or
- 15 an insecticide having a sterilizing effect on adult mosquitoes such as:
 1- (alfa-4- (chloro-alpha- cyclopropylbenzylidenamino-oxy)-p-tolyl)-3-(2,6-diflourobenzoyl)
 urea,
 diflubenzuron: (((3, 5-dichloro-4- (1,1,2,2-tetraflouroethoxy) phenylamino) carbonyl) 2, 6
 diflouro benzamide,
 20 triflumuron: 2-Chloro-N- (((4- (triflouromethoxy) phenyl)-amino-) carbonyl) benzamide, or a
 triazine such as N-cyclopropyl-1,3,5-triazine-2,4,6-triamine.
8. Insecticide composition according to one of claims 2 to 7, wherein the insect repellent is
 chosen from:
- 25 N,N-diethyl-meta-toluamide (DEET),
 N-butyl-N-acetyl-3-ethylamine propionate (35/35®, Merck)
 2-(2-hydroxy-ethyl)-piperidine carboxylic acid ester of 1-methyl-propyl (Bayrepel®, Bayer)
 N,N-diethylphenylacetamide (DEPA),
 1-(3-cyclohexen-1-yl-carbonyl)-2-methylpiperine,
 30 (2 hydroxymethylcyclohexyl) acetic acid lactone,
 2-ethyl-1, 3-hexandiol,
 indalone,
 methylneodecanamide (MNDA), or

an insect repellent derived from a plant extract such as limonene, citronella, eugenol, (+) eucamalol (1), (-)-1-epi-eucamalol, or a crude extract from plants such as *Eucalyptus maculata*, *Vitex rotundifolia*, or *Cymbopogon*.

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9. Insecticide composition according to one of claims 2 to 8, wherein the insecticide is propoxur.

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10. Insecticide composition according to one of claims 2 to 9, wherein the insect repellent is DEET.

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11. Insecticide composition according to one of claims 2 to 10, wherein the insecticide is propoxur and the insect repellent is DEET, propoxur being present at the concentration of approximately 1 to approximately 20 mg/m², preferably approximately 7.3 mg/m², and DEET being present at the concentration of approximately 50 to approximately 1000 mg/m², in particular of approximately 100 to approximately 500 mg/m², preferably approximately 360 mg/m².

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12. Use of an insecticide composition as defined in one of claims 2 to 11, for the preparation:

- of formulations, such as aerosols, lotions, creams, microcapsules, wettable powders, suspensions, liquid concentrates, emulsifiable concentrates, or
- of fabrics comprising said composition, in particular fabrics impregnated with said composition, such as impregnated mosquito nets.

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13. Fabrics protecting against insects, in particular mosquito nets, characterized in that they comprise an insecticide composition as defined in one of claims 2 to 11.

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14. Products according to claim 1, containing

- propoxur, and

- DEET

the propoxur being present at the concentration of approximately 1 to approximately 20 mg/m², preferably approximately 7.3 mg/m², and DEET being present at the concentration of approximately 50 to approximately 1000 mg/m², in particular approximately 100 to approximately 500 mg/m², preferably approximately 360 mg/m²,

as combination products for a use that is simultaneous, separated or spread over time in the context of the preparation:

- of formulations, such as aerosols, lotions, creams, microcapsules, wettable powders, suspensions, liquid concentrates, emulsifiable concentrates, or
- 5 - of fabrics comprising said composition, in particular of fabrics impregnated with said composition, such as impregnated mosquito nets.